Amendments to the Claims:

This listing of the Claims will replace all prior listings, or versions, of the claims in the present application:

Listing of Claims:

Claims 1-21 (Cancelled).

Claim 22 (Currently amended). A tunable ferroelectric capacitor comprising:

a first conducting surface;

a second conducting surface, the first and second conducting surfaces comprising a capacit~~or~~ive component;

a ferroelectric material proximate the first and second conducting surfaces; and

a variable voltage line coupled to the ferroelectric material for changing a capacitance of the capacit~~or~~ive component, responsive to a changing dielectric constant of the ferroelectric material, responsive to a voltage applied to the variable voltage line;

wherein a Q of the tunable ferroelectric capacitor, when operated in a temperature range between about –50 degrees Celsius and 100 degrees Celsius, is greater than about 80 in a frequency range between 0.25 GHz and 7.0 GHz.

Claim 23 (Previously amended): A tunable ferroelectric capacitor as in claim 22, wherein the quality factor, when operated in a temperature range between about -50 degrees Celsius and 100 degrees Celsius, is greater than about 80 in a frequency range between about 0.8 GHz and 7.0 GHz.

Claim 24 (Previously amended): A tunable ferroelectric capacitor as in claim 22, wherein the quality factor, when operated in a temperature range between

about -50 degrees Celsius and 100 degrees Celsius, is greater than about 80 in a frequency range between about 0.25 GHz and 2.5 GHz

Claim 25 (Previously amended): A tunable ferroelectric capacitor as in claim 22, wherein the quality factor, when operated in a temperature range between about -50 degrees Celsius and 100 degrees Celsius, is greater than about 80 in a frequency range between about 0.8 GHz and 2.5 GHz.

Claim 26 (Previously amended): A tunable ferroelectric capacitor as in claim 22, wherein the quality factor, when operated in a temperature range between about -50 degrees Celsius and 100 degrees Celsius, is greater than about 180 in a frequency range between 0.25 GHz and 7.0 GHz.

Claim 27 (Previously amended): A tunable ferroelectric capacitor as in claim 22, wherein the quality factor, when operated in a temperature range between about -50 degrees Celsius and 100 degrees Celsius, is greater than about 180 in a frequency range between about 0.8 GHz and 2.5 GHz.

Claim 28 (Previously amended): A tunable ferroelectric capacitor as in claim 22, wherein the quality factor, when operated in a temperature range between about -50 degrees Celsius and 100 degrees Celsius, is greater than about 80 for a capacitance in a range between about 0.3 pF and 3.0 pF.

Claim 29 (Previously amended): A tunable ferroelectric capacitor as in claim 22, wherein the quality factor, when operated in a temperature range between about -50 degrees Celsius and 100 degrees Celsius, is greater than about 80 for a capacitance in a range between about 0.5 pF and 1.0 pF.

Claim 30 (Previously amended): A tunable ferroelectric capacitor as in claim 22, wherein the quality factor, when operated in a temperature range between

about -50 degrees Celsius and 100 degrees Celsius, is greater than about 180 for a capacitance in a range between about 0.3 pF and 3.0 pF.

Claim 31 (Previously amended): A tunable ferroelectric capacitor as in claim 22, wherein the quality factor, when operated in a temperature range between about -50 degrees Celsius and 100 degrees Celsius, is greater than about 180 for a capacitance in a range between about 0.5 pF and 1.0 pF.

Claim 32 (Currently amended): A tunable ferroelectric capacitor as claimed in claim 22, wherein the capacitor has a capacitance of about 0.8 to 1.5 pF when zero voltage is applied to the ferroelectric material.

Claim 33 (Currently amended): A tunable ferroelectric capacitor as claimed in claim 22, wherein the ferroelectric material comprises barium strontium titanate.

Claim 34 (Currently amended): A tunable ferroelectric capacitor as claimed in claim 22, wherein the ferroelectric material comprises a film having a thickness of approximately one micron.

Claim 35 (Currently amended): A tunable ferroelectric capacitor as claimed in claim 22, wherein the capacitor is a microstrip gap capacitor.

Claim 36 (Currently amended): A tunable ferroelectric capacitor as claimed in claim 22, wherein the first conducting surface and the second conducting surface are separated by a gap approximately 2.5 microns wide.

Claim 37 (Currently amended): A tunable ferroelectric capacitor as claimed in claim 22, wherein the conductors are metal strips having a thickness in the range of 2-3 microns.

Claim 38 (Currently amended): A tunable ferroelectric capacitor as claimed in claim 22, wherein the capacitor is an overlay capacitor.

Claim 39 (Currently amended): A tunable ferroelectric capacitor as claimed in claim 22, wherein the second conducting surface comprises either gold or silver.

Claim 40 (Currently amended): A tunable ferroelectric capacitor as claimed in claim 22, wherein:

a first taper to the tunable ferroelectric capacitor from a ferroelectric capacitor bond pad comprises a contraction of the first conducting surface from about 4.0 mils wide to about 0.1 mils wide over a distance of about 1.0 mils; and

a second taper from the tunable ferroelectric capacitor to a DC bias pad region comprises an expansion of the second conducting surface from about 0.1 mils wide to about 4.0 mils wide over a distance of about 1.0 mils.

Claim 41 (Cancelled).